

### **Listing of Claims:**

1. (Currently Amended) A method of managing alerts issued by intrusion detection sensors (~~11a, 11b, 11e~~) of an information security system (~~1~~) including an alert management system (~~13~~), each alert being defined by an alert identifier and an alert content, ~~which method includes the following steps~~ the method comprising:

associating with each of the alerts issued by the intrusion detection sensors (~~11a, 11b, 11e~~) a description including a conjunction of valued attributes belonging to attribute domains;

organizing the valued attributes belonging to each attribute domain into a taxonomic structure defining generalization relationships between said valued attributes, ~~the a~~ a plurality of attribute domains ~~thus~~ forming a plurality of taxonomic structures;

completing the description of each of said alerts with sets of values induced by the taxonomic structures based on ~~the basis of~~ the valued attributes of said alerts to form complete alerts; and

storing said complete alerts in a logic file system (~~21~~) to enable ~~them~~ said complete alerts to be consulted;

wherein each complete alert is saved in the logic file system as a file with a completed description of each complete alert expressed using propositional logic.

2. (Currently Amended) The method according to claim 1, wherein the complete alerts are consulted by at least one of successively interrogating and ~~and/or~~ browsing said complete alerts so that the alert management system (~~13~~) responds to a request by supplying pertinent

valued attributes enabling a subset of complete alerts to be distinguished in a set of complete alerts satisfying the request ~~in order~~ to enable said request to be refined.

3. (Currently Amended) The method according to claim 2, wherein the pertinent valued attributes assigned ~~the~~ a highest priority are those that are most general, given the taxonomic structures.

4. (Currently Amended) The method according to claim 2, wherein the alert management system ~~(13)~~ further responds to the request by supplying alert identifiers satisfying the request and whose description cannot be refined with respect to said request.

~~supplying alert identifiers satisfying the request and whose description cannot be refined with respect to said request.~~

5. (Currently Amended) The method according to claim 1, wherein the alert identifier is a pair consisting of an identifier of the intrusion detection sensor ~~(11a, 11b, 11e)~~ that produces the alert and an alert serial number assigned by said intrusion detection sensor.

6. (Currently Amended) The method according to claim 1, wherein the content of each alert includes a text message supplied by ~~the~~ a corresponding intrusion detection sensor ~~(11a, 11b, 11e)~~.

7. (Previously Presented) The method according to claim 1, wherein each valued attribute includes an attribute identifier and an attribute value.

8. (Currently Amended) The method according to claim 7, wherein each attribute identifier is associated with one of the following attribute domains: attack domain, attacker identity domain, victim identity domain[[,]] and attack date domain.

9. (Currently Amended) The method according to claim 1, wherein the description of a given alert is completed by recovering, recursively from generalization relationships of the taxonomic structures, a set including the more general valued attributes not already included in the description of another alert completed previously.

10. (Previously Presented) The method according to claim 1, wherein the valued attributes in the taxonomic structure are organized in accordance with an acyclic directed graph.

11. (Currently Amended) A computer-readable medium encoded with a computer program designed to execute the method according to claim 1, when it is executed by a computer that causes the an alert management system (13) to manage alerts issued by intrusion detection sensors, the computer program comprising:

program code for associating with each of the alerts issued by the intrusion detection sensors a description including a conjunction of valued attributes belonging to attribute domains;

program code for organizing the valued attributes belonging to each attribute domain into a taxonomic structure defining generalization relationships between said valued attributes, a plurality of attribute domains forming a plurality of taxonomic structures;

program code for completing the description of each of said alerts with sets of values induced by the taxonomic structures based on the valued attributes of said alerts to form complete alerts; and

program code for storing said complete alerts in a logic file system to enable said complete alerts to be consulted;

wherein each complete alert is saved in the logic file system as a file with a completed description of each complete alert expressed using propositional logic.

12. (Currently Amended) Alert management system for managing alerts issued by intrusion detection sensors (11a, 11b, 11e), each alert being defined by an alert identifier and an alert content, ~~which the system includes~~ comprising:

processor means for associating with each of the alerts issued by the intrusion detection sensors (11a, 11b, 11e) a description including a conjunction of valued attributes belonging to attribute domains;

processor means for organizing the valued attributes belonging to each attribute domain into a taxonomic structure defining generalization relationships between said valued attributes, ~~the a~~ a plurality of attribute domains ~~thus~~ forming a plurality of taxonomic structures;

processor means for completing the description of each of said alerts with sets of values induced by the taxonomic structures based on ~~the basis of~~ the valued attributes of said alerts to form complete alerts; and

processor means for storing said complete alerts in a logic file system (24) to enable ~~them~~ said complete alerts to be consulted;

wherein each complete alert is saved in the logic file system as a file with  
a completed description of each complete alert expressed using propositional  
logic.

13. (Currently Amended) Information security system comprising intrusion detection sensors and ~~an~~ the alert management system according to claim 12.